## WOOD CARVING, ADAPTED FOR BOTH THE AMATEUR AND THE PROFESSIONAL.

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### CHAPTER X—ON FRET CUTTING, PIERCED WORK, ETC.

AT the outset of my remarks on the subject of this instalment of the series, I would impress upon the worker that, when the design is produced by chisel and gouge only, and any portion of it is pierced, the panel, or such like bits of ornamental work as it would probably be, must be clamped down very tightly and evenly to a perfectly level and smooth bench or plank, as if there be the slightest irregularity in this backboard, wood of the piece in course of carving will become splintered and rough, possibly leading, if not to damage, at least to some trouble. Of course, I am only speaking as regards pure carving; when the saw is called in this does not occur, and as saw piercing and fret sawing come legitimately within the sphere of these articles, as before noted, I shall touch lightly thereon. It is surprising how ancient tools come down to present day requirements with but very little modification, and this is peculiarly the case with the ordinary buhl saw, which with many to whom money is little or no object gives place to the more handy, effective and speedy fret saw, worked by a treadle. Much good work, however, can be done with a buhl saw, skillfully and carefully employed, while the saws in England range from size 000 to 7, though from 1 to 7 will be found all that is required for ordinary work. These blades are very small and fine, and are fitted into the saw frame by means of a screw opposite the handle, which allows of the saw being made perfectly tight, while the large

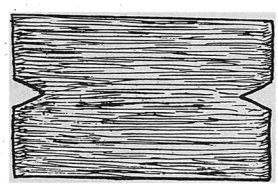
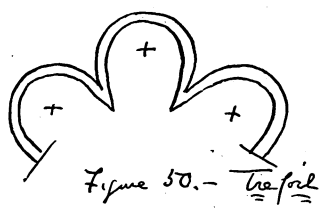


Fig. 49.—Fret Cutting-Board.

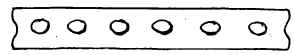
bow of the frame, some 12 inches while only half that distance in length, permits of the saw being manipulated without being taken out of the frame, thus traversing outside that portion of the wood operated upon. Other tools required now are a few brad-awls or drills, and as there are so many in the market—especially American—I shall not refer to them further here, but leave the workman to make his own selection. A clamp or hand screw—a couple should be procured—and a cutting-board for the fret work will also be required, and at Figure 49 I illustrate a useful form of one. It is made in ¾-inch wood, about 18 inches in length and about 15 inches in width. As shown in the illustration, a V-shaped piece should be taken out at each end, but not both the same size, one being about 2½ inches in width, and some 4 inches in length, and the other about 1 inch in width by 2½ inches in length, so as to accommodate different suggestions of work. This board must be screwed to the working bench or table, and so that the ends project.

Presuming now, to obtain an illustration, and one will serve as well as a dozen, that a design is desired to be cut, I will take one which is very often met with—not only in wood, but in store work, viz., a trefoil, such as is found in gothic windows and else-




where, and illustrated in Figure 50. In this, proceed first to carefully carve the outlines, as directed for the book pattern slide in the preceding chapter. Then bore with a brad-awl or other suitable tool a small hole at one or other of the points marked with cross (+) in the sketch, and fasten the wood in the jaws of the bench vice, or, if not available, fasten down to the bench. Then pass one of the small saw blades through the first holes made, with the teeth running from the operator; next put the saw frame over the work, and secure the blade firmly therein, tightening with the thumb-screw. Then saw away, steadily and carefully, following the lines of the pattern as drawn. The other two holes marked are made—and the number can be increased if so desired—to enable the saw to be turned with greater facility when reached. Do not choose a large blade under the impression that it will cut quicker than a small fine one, as such is not the case, a No. 1 or No. 2 blade cutting the wood better than a larger blade, with the additional advantage of leaving it less rough and not being so liable to fracture, especially if the board be a rather thin one.

When the edges are left very rough from the saw, they can be smoothed with a file made for this class of work, which can be procured at any rate in England, and I doubt not in the United States also, in some half dozen sizes, and flat, round, square and 3-square in section. The trefoil having been cut, resume the saw, and smooth and trim the edges up carefully with a gouge, bev-



Plan of Pipe-Board.

eling on one or both sides. If money is not an object, it is better to have a fret-cutting machine or lathe, of which there are several good ones on the market, from which I must leave the workman to make his own selection.

As an instance to which a trefoil can be applied, and at the same time forming a useful article in the household, I may mention that of a music or book-rest or slope. This should be made in oak, and would really serve as a companion to the book-slide treated in my last, and on the portion below the shelf upon which the book rests an oak leaf or two, to preserve the semblance, should be introduced, but only in low relief, and for the carving of which my previous directions will suffice. Book-rests are so numerous and varied that I shall not give a description of one here, as they can be procured from any store, and one will serve as a copy for dozens.

As I have entered upon fret-cutting in this series, a few general directions may not be out of place. Before starting on a regular finished piece of work, have some practice, for which old cigar boxes offer a cheap and ready medium. First, learn to cut a straight line, then proceed to curves, from the simplest to the most difficult, beginning with the circular and working on to the elliptical contours, and so on till the well-known double elliptical curve, known as the line of beauty, is attained. Too much practice on this portion of the work cannot be obtained, while another difficulty in fret-sawing or cutting is the taking off of a corner accurately and neatly, and for this purpose the beginner should keep himself employed for some time in sawing out angular serrates. To effect this, bore a hole at the bottom of the first triangle of the design, which, like the more elaborate samples, must

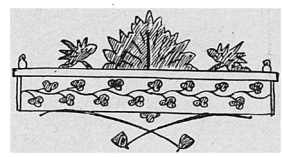
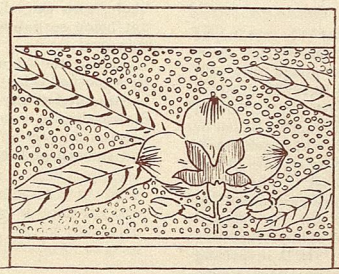


Fig. 51.—Pipe Rack.

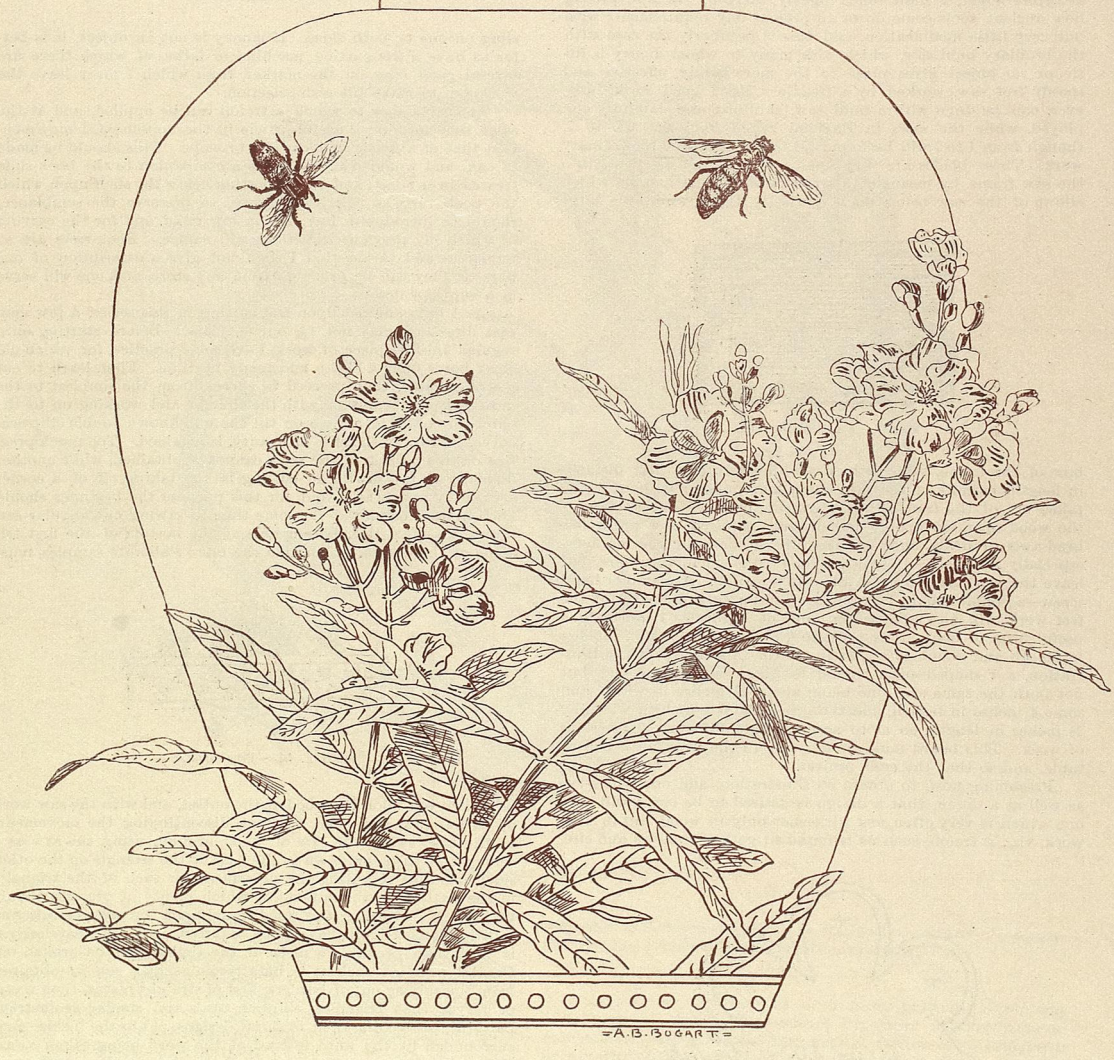
be drawn out upon the wood at the outset, and with the saw work up to its apex, and then, without discontinuing the movements of the saw, swing the bits of wood around, using the saw as a center, and then saw down to the base of the triangle on the other side, and thus repeating the movement for each of the triangles in the pattern, in the cutting of which plenty of practice should be taken. In turning the wood round upon the saw as a fulcrum, a little "knack" will have to be acquired, as if done carelessly it is more than probable a piece of the timber will be broken off. Capital practice, such as is here recommended, can be obtained from the cutting out of borders, first of straight pieces, then waves or curves, then triangles, elliptics, ovals and similar geometrical patterns, proceeding then to floral designs, cut as the inside—*i. e.*, surrounded by the word instead of the word being taken away. The pieces thus cut will be found, if complete in all respects, very useful for a variety of purposes, and should be consequently kept for future utilization.

Having thus mastered these studies, the worker should now proceed with a finished bit of fret-cutting, and for this purpose there is hardly anything better, from the artistic as from the useful point of view, than the cutting of a wall bracket or pipe rack, if similar to that of which I give a sketch at Figure 51. For this take a piece of oak or walnut, almost 3-16 inch in thickness and

free from knots, about 9 or 10 inches in length, and about 2 inches in width. In this bore some half dozen or more holes, as shown in the plan, not too large, and about an inch apart. This is really the rack. For the fret portion, get a piece of thin oak or walnut, upon which draw the design and secure in the usual way, cutting out first the top portion and the outlines generally, but leaving the bottom portion with the pipes till the last, on account of the care required with the two stems. I have made the design exceedingly simple, my object being to give simple work and to convey an idea only for working out by the student. Then cut the shamrock border below, making a hole and inserting the saw, as previously directed, and cutting the curves and leaves carefully, which, if properly accomplished, should come away in one piece, when it could be utilized for inlaying, which is outside the province of this series. Lastly, cut the bottom portion where the pipes are and take great care with it, especially in trimming up the edges after removing the saw. The ornamental portions can be



cut in either one or two pieces, the former being preferable on the score of strength, in which case allow a space of $\frac{3}{16}$ of an inch between the top and bottom pieces for the affixing of the rack, which had best be accomplished by some small brass screws. The two catches shown at each end are put on in the same way, should be of brass, and are for suspending the pipe bracket or rack from the wall, usually at the side of the fireplace in the smoking room. A small half-round file will be found the best wherewith to trim up the edges, and glass paper for removing the "burr" left on the back from the saw, using for this a block—a couple of pieces of wood, the bottom one of which is covered with glass paper, and the top piece then screwed on tightly, the screws being easily removed when it is required to renew the paper. This is the best way to smooth up all "flat" work. The article should now be ready for varnishing, for which purpose use shellac varnish, and which plan I recommend, or oiling, when use boiled linseed oil, or for French polishing, which I certainly do not advise. In this work, whether fret cutting or carving, the workman must bear in mind that the pattern must always be placed on the wood so that the weaker portions of the design run lengthwise with the grain. I shall now take the student, in my next chapter, on to the cutting of medallion portraits—a very interesting portion of the wood carver's art. (TO BE CONTINUED.)




DESIGN FOR VASE DECORATION, BY A. B. BOGART.

A SUFFICIENTLY serviceable copy of a printed outlined decorative design may be obtained by damping a somewhat absorbent paper with a weak solution of acetate of iron, placing this on the print, and pressing the two together in a copying press. Should the design abound in detail dampen unsized paper with a weak solution of sulphate of iron mixed with sugar water, and proceed as above.